FORT CARSON 2015 Drinking Water Quality Report (For Calendar Year 2014)

Public Water System ID: CO-0221445

We are pleased to present to you this year's water quality report. Our constant goal is to provide you with a safe and dependable supply of drinking water. Please contact Harold Noonan at 719-526-1730 with any questions about the Drinking Water Consumer Confidence Rule (CCR) or for public participation opportunities that may affect the water quality.

General Information – All drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline (1-800-426-4791) or by visiting water.epa.gov/drink/contaminants.

Possible Water Contaminants – The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity. Contaminants that may be present in source water include:

- Microbial contaminants: viruses and bacteria that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- Inorganic contaminants: salts and metals, which can be naturally-occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- Pesticides and herbicides: may come from a variety of sources, such as agriculture, urban stormwater runoff, and residential uses.
- Radioactive contaminants: can be naturally occurring or be the result of oil and gas production and mining activities.
- Organic chemical contaminants: including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, and also may come from gas stations, urban storm water runoff, and septic systems.

In order to ensure that tap water is safe to drink, the Colorado Department of Public Health and Environment prescribes regulations limiting the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration regulations establish limits for contaminants in bottled water that must provide the same protection for public health.

Vulnerable Populations Advisory – Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV-AIDS or other immune system disorders, some elderly, and infants can be particularly at risk of infections. These people should seek advice about drinking water from their health care providers. For more information about contaminants and potential health effects, or to receive a copy of the U.S. Environmental Protection Agency (EPA) and the U.S. Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and microbiological contaminants call the EPA Safe Drinking Water Hotline at (1-800-426-4791).

Lead in Drinking Water – If present, elevated levels of lead can cause serious health problems (especially for pregnant women and young children). It is possible that lead levels at your home may be higher than other homes in the community as a result of materials used in your home's plumbing. If you are concerned about lead in your water, you may wish to have your water tested. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. Additional information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline (1-800-426-4791) or at epa.gov/safewater/lead.

Source Water Assessment and Protection (SWAP) – Fort Carson purchases water from Colorado Springs Utilities (CSU). The Colorado Department of Public Health and Environment has provided CSU with a Source Water Assessment Report for our water supply. For general information or to obtain a copy of the report please visit wqcdcompliance.com/ccr. The report is located under "Source Water Assessment Reports", and then "Find my county's water report". Select El Paso County and find 121150; Colorado Springs Utilities or by contacting Harold Noonan at 719-526-1730. The Source Water Assessment Report provides a screening-level evaluation of potential contamination that ***could*** occur. It ***does not*** mean that the contamination ***has or will*** occur. CSU uses this information to evaluate the need to improve the current water treatment capabilities and prepare for future contamination threats. This can help ensure that quality finished water is delivered to your homes. In addition, the source water assessment results provide a starting point for developing a source water protection plan. Potential sources of contamination in CSU's source water area are listed below.

Please contact us to learn more about what you can do to help protect your drinking water sources, any questions about the Drinking Water Consumer Confidence Report, to learn more about our system, or to attend scheduled public meetings. We want you, our valued customers, to be informed about the services we provide and the quality water we deliver to you every day.

Source	Source Type	Water Type
Purchased from Colorado Springs Utilities (PWSID: CO-121150)	Consecutive Connection	Surface Water

Potential Sources of Contamination

- EPA Superfund Sites
- EPA Abandoned Contaminated Sites
- EPA Hazardous Waste Generators
- EPA Chemical Inventory/Storage Sites
- EPA Toxic Release Inventory Sites
- Permitted Wastewater Discharge Sites
- Aboveground, Underground and Leaking Storage Tank Sites
- Solid Waste Sites
- Existing/Abandoned Mine Sites
- Concentrated Animal Feeding Operations
- Commercial/Industrial Transportation
- High and Low Intensity Residential
- Urban Recreational Grasses
- Quarries/Strip Mines/Gravel Pits
- Agricultural land (row crops, small grain, pasture/hay, orchards/vineyards, & fallow)
- Forest
- Septic Systems
- Oil/Gas Wells
- Road Miles

Terms and Abbreviations

- Action Level (AL) − the concentration of a contaminant which, if exceeded, triggers treatment and other regulatory requirements.
- Compliance Value (No Abbreviation) – Single or calculated value used to determine if regulatory contaminant level (e.g. MCL) is met. Examples of calculated values are the 90th Percentile, Running Annual Average (RAA) and Locational Running Annual Average (LRAA).
- Formal Enforcement Action (No Abbreviation) − Escalated action taken by the State (due to the risk to public health, or number or severity of violations) to bring a non-compliant water system back into compliance.
- Locational Running Annual Average (LRAA) – the average of sample results for samples collected at a particular monitoring location during the most recent four calendar quarters.
- Maximum Contaminant Level (MCL) − the highest level of a contaminant allowed in drinking water.
- Maximum Contaminant Level Goal (MCLG) − The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.
- Maximum Residual Disinfectant Level (MRDL) − the highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.
- Maximum Residual Disinfectant Level Goal (MRDLG) − the level of a drinking water disinfectant, below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.
- Nephelometric Turbidity Unit (NTU) – Measure of the clarity of water. Turbidity in excess of five NTU is just noticeable to the average person.
- Non-Detect (ND) – Result is below the reportable level for the analysis.
- Not Applicable (N/A) – Does not apply or not available.
- Parts per billion = Micrograms per liter (ppb = ug/L) − One part per billion corresponds to one minute in 2,000 years, or one penny in $10,000,000.
- Parts per million = Milligrams per liter (ppm = mg/L) − One part per million corresponds to one minute in two years or a single penny in $10,000.
- Picocuries per Liter (pCi/L) – A measure of radioactivity in water.
- Range (R) − Lowest value to the highest value.
- Sample Size (n) − Number or count of values (i.e. number of water samples collected).
- Treatment Technique (TT) − A required process intended to reduce the level of a contaminant in drinking water.
- Violation (No Abbreviation) − Failure to meet a Colorado Primary Drinking Water Regulation.

Detected Contaminants

Fort Carson routinely monitors for contaminants in your drinking water according to Federal and State laws. The following table(s) show all detections found in the period of January 1 to December 31, 2014 unless otherwise noted. The State of Colorado requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year, or the system is not considered vulnerable to this type of contamination. Therefore, some of our data, though representative, may be more than one year old. Violations and Formal Enforcement Actions, if any, are reported in the next section of this report. Note: Only detected contaminants sampled within the last 5 years appear in this report. If no tables appear in this section then no contaminants were detected in the last round of monitoring.

Summary of Disinfectants Sampled in the Distribution System

Contaminant Name	Month	Results	Sample Size	TT Requirement	TT Violation	Typical Sources
Chlorine	June	Lowest monthly percentage of samples meeting TT requirement: 91.1%	56	For any two consecutive months, At least 95% of samples (per month) must be detectable	No	Water additive used to control microbes

Lead and Copper Sampled in the Distribution System

Contaminant Name	Time Period	90th Percentile	# of Locations Sampled	Unit of Measure	90th Percentile AL	Sample Sites Above AL	90th Percentile AL Exceedance	Typical Sources
Copper	May 2013	0.3	60	ppm	1.3	0	No	Corrosion of household plumbing systems; Erosion of natural deposits
Copper	Sept 2013	0.37	60	ppm	1.3	1	No	Corrosion of household plumbing systems; Erosion of natural deposits
Lead	May 2013	3.9	60	ppb	15	1	No	Corrosion of household plumbing systems; Erosion of natural deposits
Lead	Sept 2013	4.9	60	ppb	15	1	No	Corrosion of household plumbing systems; Erosion of natural deposits

Disinfection Byproducts Sampled in the Distribution System

Name	MCL	MCLG	Units	Average Level Detected (Range)	Sample Size	Highest LRAA {Range} (Site)	MCL Violation	Sample Dates	Typical Sources
Total Haloacetic Acids (HAA5)	60	N/A	ppb	19.9 (3.7-45.5)	16	30.6 {4.4-30.6} (Bldg 9633)	No	Feb, May, Aug, Nov 2014	Byproduct of drinking water disinfection
Total Trihalomethanes (TTHM)	80	N/A	ppb	51.9 (5.6-92.5)	16	62.3 {30.3-62.3} (Bldg 3900)	No	Feb, May, Aug, Nov 2014	Byproduct of drinking water disinfection

The following two (2) tables are detected constituents as reported to us by Colorado Springs Utilities.

Detected Contaminants at CSU's Water Treatment Plants (McCullough, Pine Valley, Mesa and Fountain Valley) (PWSID CO-0121150)

Contaminant	MCL	MCLG	Units	Highest Level Detected (Range)	MCL Violation	Sample Dates	Typical Sources
Antimony	6	6	ppb	0.55 (ND-0.55)	No	May 2014	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder
Barium	2	2	ppm	0.0585 (0.0220-0.0585)	No	May 2014	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Fluoride	4	4	ppm	1.43 (0.13-1.43)	No	May 2014	Erosion of natural deposits; discharge from fertilizer and aluminum factories
Hexachlorocyclopentadiene	50	50	ppb	0.050 (ND-0.050)	No	Jan, May 2014	Discharge from chemical factories
Nickel	N/A	N/A	ppb	0.51 (ND-0.51)	No	May 2014	Erosion of natural deposits; discharge from industries; discharge from refineries and steel mills
Nitrate (as Nitrogen)	10	10	ppm	0.47 (ND-0.47)	No	May 2014	Runoff from fertilizer use, leaching from septic tanks, sewage, erosion of natural deposits
Radium (combined 226,228)	5	0	pCi/L	1.9 (ND-1.9)	No	May, Jun 2014	Erosion of natural deposits
Uranium	30	0	ppb	10 (ND-10)	No	2014	Erosion of natural deposits
Sodium	N/A	N/A	ppm	20.6 (6.32-20.6)	No	May 2014	Erosion of natural deposits
Total Organic Carbon (TOC)	TT	N/A	N/A	N/A	No	Running Annual Average	Naturally present in the environment
Turbidity	TT ≤0.3 in 95% of monthly samples	N/A	NTU	Highest turbidity 0.36 (Oct 2014) 100% of samples ≤0.3	No	Jan-Dec 2014	Soil runoff

Unregulated Contaminant Monitoring Rule - The 1996 amendments to the Safe Drinking Water Act required that EPA establish criteria for a program to monitor unregulated contaminants and to identify no more than 30 unregulated contaminants to be monitored every five years.

Unregulated contaminants are those contaminants that do not have a drinking water standard (maximum contaminate level) established by EPA. The purpose of the UCMR is to assist EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted. The third round of the UCMR required monitoring for 28 contaminants. Colorado Springs Utilities was required to monitoring for these contaminants for 4 quarters, starting in July 2013. The results for any contaminants detected, to date, are listed below.

Contaminant	Average Level Detected (Range)	Units	Sample Dates	Typical Sources
Chlorate	3.7 (ND-63)	ppb	Jul, Oct 2013 & Jan, Apr, May 2014	Powerful oxidizer once used in pyrotechnics. Can be chemically bound to make metal salts
Chromium-6	0.001 (ND-0.041)			Used for chrome plating, dyes and pigments, leather tanning, and wood preserving
Molybdenum	0.42 (ND-1.4)			Used to make steel alloys, and in high-pressure and high-temperature applications, as pigments and catalysts
Strontium	79.4 (46-110)			Used in making ceramics and glass products, pyrotechnics, paint pigments, fluorescent lights, and medicines
Vanadium	0.02 (ND-0.31)			Used to make metal alloys. Used in making rubber, plastics, ceramics, and other chemicals

Violations, Significant Deficiencies, and Formal Enforcement Actions

No Violations or Formal Enforcement Actions

More Information

Have questions regarding this report? Please call DPW Environmental Division Water Programs at (719) 526-1730. Questions regarding our source water from Colorado Springs Utilities (CSU)? Please call CSU at (719) 668-4560 or visit http://www.csu.org. CSU's 2014 Water Quality Report can be found at https://www.csu.org/CSUDocuments/waterqualityreport2014.pdf. CSU's 2015 Water Quality Report will be published in June and will be at https://www.csu.org/CSUDocuments/waterqualityreport2015.pdf. The CSU Board meets the Wednesday between City Council meetings.